

Release notes for ENDF/B Development photoat-002_He_000
evaluation

ENDF
B-VII.dev

October 13, 2016

- checkr Warnings:

1. A previous error halted parsing of the current section
MAT= 200, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT= 200, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      144 TO      157
```

- checkr Errors:

1. A variable is outside the allowed ENDF range
MAT= 200, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT= 200, MF= 1, MT=451
MOD =      3 OUT OF RANGE      0 -      1      RECORD NUMBER      144
```

2. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=23, MT=501 (0): Directory (b)

```
ERROR(S) FOUND IN MAT= 200, MF=23, MT=501
SECTION 23/501 NOT IN DIRECTORY      RECORD NUMBER      159
```

3. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=23, MT=502 (0): Directory (b)

```
ERROR(S) FOUND IN MAT= 200, MF=23, MT=502
SECTION 23/502 NOT IN DIRECTORY      RECORD NUMBER      374
```

4. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=23, MT=504 (0): Directory (b)

```
ERROR(S) FOUND IN MAT= 200, MF=23, MT=504
SECTION 23/504 NOT IN DIRECTORY      RECORD NUMBER      488
```

5. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=23, MT=515 (0): Directory (b)

```
ERROR(S) FOUND IN MAT= 200, MF=23, MT=515
SECTION 23/515 NOT IN DIRECTORY      RECORD NUMBER      529
```

6. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=23, MT=516 (0): Directory (b)

```
ERROR(S) FOUND IN MAT= 200, MF=23, MT=516
SECTION 23/516 NOT IN DIRECTORY      RECORD NUMBER      560
```

7. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=23, MT=517 (0): Directory (b)

ERROR(S) FOUND IN MAT= 200, MF=23, MT=517
SECTION 23/517 NOT IN DIRECTORY RECORD NUMBER 603

8. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=23, MT=522 (0): Directory (b)

ERROR(S) FOUND IN MAT= 200, MF=23, MT=522
SECTION 23/522 NOT IN DIRECTORY RECORD NUMBER 636

9. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=23, MT=534 (0): Directory (b)

ERROR(S) FOUND IN MAT= 200, MF=23, MT=534
SECTION 23/534 NOT IN DIRECTORY RECORD NUMBER 668

10. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=27, MT=502 (0): Directory (b)

ERROR(S) FOUND IN MAT= 200, MF=27, MT=502
SECTION 27/502 NOT IN DIRECTORY RECORD NUMBER 701

11. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=27, MT=504 (0): Directory (b)

ERROR(S) FOUND IN MAT= 200, MF=27, MT=504
SECTION 27/504 NOT IN DIRECTORY RECORD NUMBER 748

12. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=27, MT=505 (0): Directory (b)

ERROR(S) FOUND IN MAT= 200, MF=27, MT=505
SECTION 27/505 NOT IN DIRECTORY RECORD NUMBER 796

13. Missing a section in directory so your directory is messed up. This error will break everything else
MAT= 200, MF=27, MT=506 (0): Directory (b)

ERROR(S) FOUND IN MAT= 200, MF=27, MT=506
SECTION 27/506 NOT IN DIRECTORY RECORD NUMBER 860

• fudge-4.0 Warnings:

1. generic warning message
reaction label 0: He + gamma [coherent] / Product: gamma (Error # 0): Warning

WARNING: coherentScattering is not a valid distribution component for 2-body reaction

2. FIXME: Generic fudge unimplemented message
reaction label 0: He + gamma [coherent] / Product: gamma (Error # 2): Generic unimp (c)

WARNING: Checking not yet implemented for pointwise type data

3. generic warning message
reaction label 1: He + gamma [incoherent] / Product: gamma (Error # 0): Warning

WARNING: incoherentScattering is not a valid distribution component for 2-body reaction

4. FIXME: Generic fudge unimplemented message
reaction label 1: He + gamma [incoherent] / Product: gamma (Error # 2): Generic unimp (c)

WARNING: Checking not yet implemented for piecewise type data

5. Cross sections do not correctly sum up properly according to an ENDF (or equivalent) sumrule
summedReaction label 5: total (Error # 0): Sumrule

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 100.00%

• fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree
reaction label 0: He + gamma [coherent] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1. eV!

2. 2-body reaction not in center-of-mass frame
reaction label 0: He + gamma [coherent] / Product: gamma (Error # 1): 2-body not in COM

WARNING: 2-body reaction not in center-of-mass frame!

3. Calculated and tabulated thresholds don't agree
reaction label 1: He + gamma [incoherent] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1. eV!

4. 2-body reaction not in center-of-mass frame
reaction label 1: He + gamma [incoherent] / Product: gamma (Error # 1): 2-body not in COM

WARNING: 2-body reaction not in center-of-mass frame!

5. Energy range of data set does not match cross section range
reaction label 1: He + gamma [incoherent] / Product: gamma / Distribution incoherentScattering - piecewise: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (0.0 -> 1000000000.0) vs (1.0 -> 1e+11)

6. Calculated and tabulated thresholds don't agree
reaction label 2: e- + e+ + He [electron field] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2.044e6 eV!

7. Calculated and tabulated thresholds don't agree
reaction label 3: $e^- + e^+ + He$ [nuclear field] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1.022e6 eV!

8. Calculated and tabulated thresholds don't agree
reaction label 4: $e^- + He1s1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 23.42 eV!

9. Calculated and tabulated thresholds don't agree
summedReaction label 5: total / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1. eV!

10. Calculated and tabulated thresholds don't agree
summedReaction label 6: pair product / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1.022e6 eV!

11. Calculated and tabulated thresholds don't agree
summedReaction label 7: photoelectric absorption / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 23.42 eV!